A cutaneouse electrode (patch, paddle or similar device) is located on the back of the patient 13 and a second cutaneouse electrode (patch, paddle or similar device) is located on the chest of the patient 14. The cutaneouse electrode located on the chest made active by the Safe Junction Box and also the high surface area electrodes located on the heart. The energy of defibrillator

What is claimed is:

1. A system for use with standard defibrillators that includes high surface area electrodes designed to be used internally or externally to form a variety of shock vector configurations better described as single dimension, two dimension and also three dimensional. The system consisting of,

   i. A Safe junction box equipped with passive semi-conductor like circuit designed to protect patient from unsafe voltages by diverting the excess and only the excess energy away from the electrodes but only in certain selection settings.

   ii. A switch mounted on the Safe Junction Box designed to redirect the energy supplied by the defibrillator to one or more electrodes depending on choice that will always include at least two and at least the option to switch back to external for safety. The second option being directed through patient protective circuitry that limits the voltage but never stops all the voltage to ensure therapy is delivered to terminate life threatening arrhythmia or none life threatening arrhythmia.

   iii. Internal electrodes mounted on a catheter or lead made so that current densities to be used at the surface of the electrodes never exceed 2 Amp per centimeter squared.

   iv. External electrodes mounted on the skin of the patient and requiring no blood or other internal body fluid contact.

   v. The entire system being passive in nature because all energy required to defibrillate is supplied by another box (standard field defibrillator) or integrated with it own pulse generating circuitry that has been designed to isolate internal shocks from external

shocks. So that a patient can never be accidentally be shocked with energies that would result in the electrodes located in the heart having greater than 2 Amps per centimeter squared of energy.

2. The device of claim 1, wherein a catheters is located in the right atria and a separate catheter is located in the right ventricle and a shock vector is created for terminating ventricular tachycardia or ventricular fibrillation.

3. The device of claim 1, wherein a catheters is located in the right atria and a separate catheter is located in pulmonary artery and a shock vector is created for terminating atrial tachycardia or ventricular fibrillation.

4. The device of claim 1, wherein a single catheter with 3 electrodes and said electrodes are located in the right atria, right ventricle and pulmonary artery and a shock vector is created for terminating atrial tachycardia or ventricular fibrillation. Varying the direction of shock vectors using the Safe Switch box selector knob that redirects the path of energy.

5. The device of claim 1, wherein a single catheter with 2 electrodes and said electrodes are located in the right atria and Coronary Sinus and a shock vector is created for terminating atrial tachycardia or atrial fibrillation.

6. The device of claim 1, where one of the preferred embodiments for managing unsafe energy is a Metal Oxide Varistor (MOV) that latches (limits) energy by way of limiting voltage for internal electrodes. The desired limit adjustable by properly specifying the Metal Oxide Varistor so that surface area current densities never exceed 2 Amps per centimeter squared.